

MYCOTAXON

Volume 115, pp. 481–484

January–March 2011

DOI: 10.5248/115.481

Septobasidium sichuanense sp. nov. (Septobasidiaceae) from China

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ABSTRACT — A new species, *Septobasidium sichuanense*, is described. It was collected from Sichuan Province, China.

KEY WORDS — *Pucciniomycetes*, *Septobasidiales*, taxonomy

A species of *Septobasidium*, recently collected from Sichuan Province, is described here as new:

Septobasidium sichuanense S.Z. Chen & L. Guo, sp. nov.

FIGS. 1–7

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Basidiomata resupinata, 0.4–6.5 cm longa, 0.3–4 cm lata, alba vel cinnamomeo-brunnea, margine determinata, superficie laevia, in sectione 240–1300 µm crassa. Subiculum brunneum, 15–40 µm crassum. Columnae brunneae, primum 30–60 µm altae, deinde 120–290 µm altae, 15–250 µm latae. Strata hypharum 40–620 µm alta. Interdum hyphae repullulantes, super hymenium stratum hypharum secundum 410–650 µm altum formantes. Hymenium 45–90 µm crassum. Basidia cylindrica vel clavata, recta vel curvata, 2-cellularia, 17–27 × 6–7.5 µm, hyalina vel brunneola. Sine probasidio. Basidiosporae non visae. Haustoria ex cellulis globularibus et hyphis irregulariter spiralibus constantia.

TYPE: On *Punica granatum* L. (Punicaceae). China, Sichuan, Mianning, alt. 1873 m, 17.IX.2010, Y.F. Zhu & L. Guo 368, HMAS 242046 (holotype), associated with *Lepidosaphes* sp. (Diaspididae).

Basidiomata on trunks and branches, resupinate, 0.4–6.5 cm long, 0.3–4 cm wide, patches frequently confluent, white or cinnamon-brown; margin determinate, surface smooth. In section 240–1300 µm thick. Subiculum brown, 15–40 µm thick. Pillars brown, 30–60 µm high in the young stage and 120–290 µm high in the older stage, 15–250 µm wide. Hyphal layer 40–620 µm high. Hymenial layer 45–90 µm thick, sometimes from hymenial layer the fungal hyphae renew growth to form a second layer, 410–650 µm high. Basidia arising

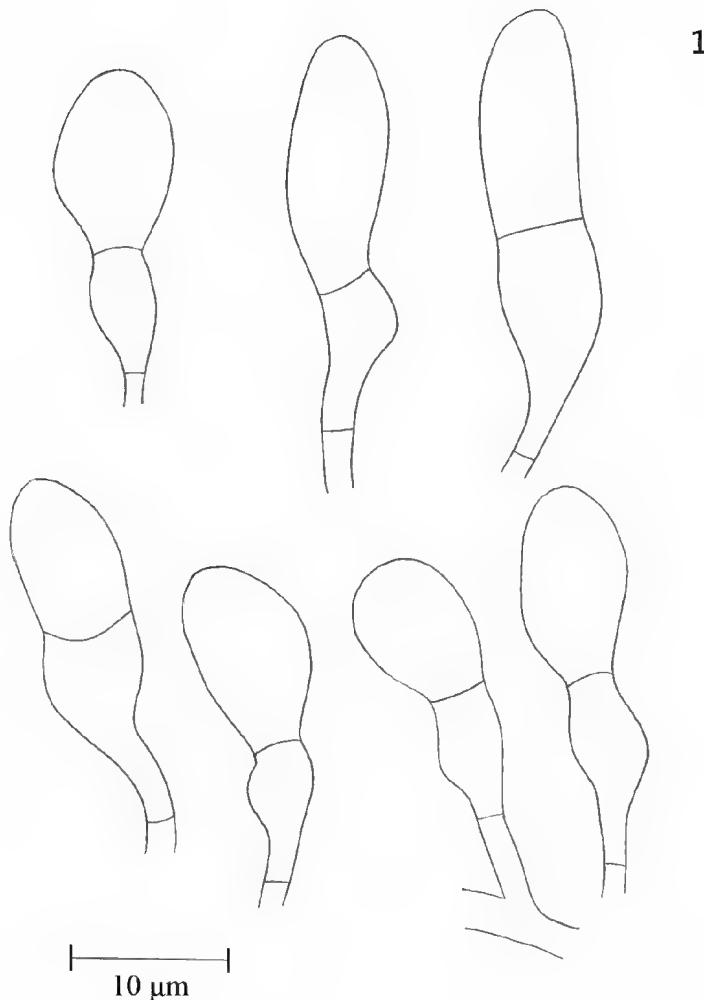
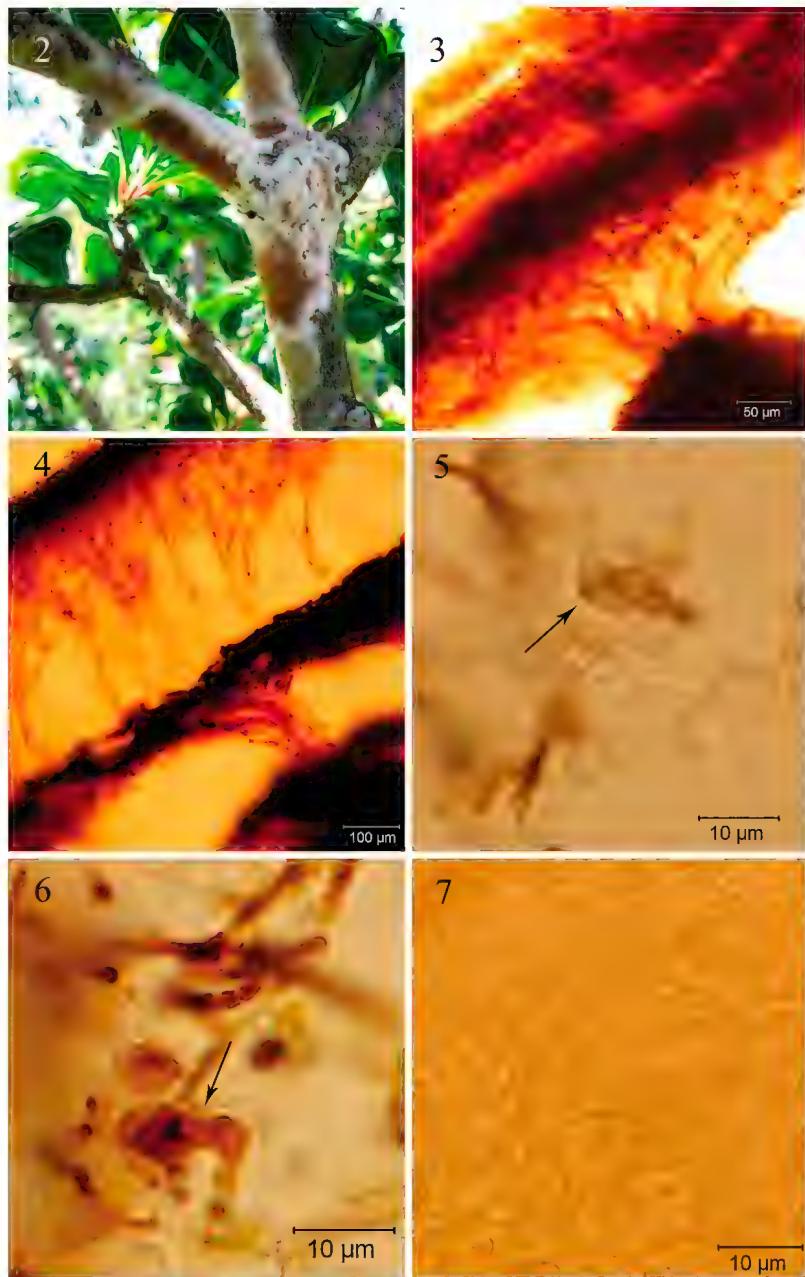


FIG. 1. Basidia of *Septobasidium sichuanense* (HMAS 242046, holotype).

directly from the hyphae without a probasidial cell, cylindrical or clavate, often constricted at the septum, straight or curved, 2-celled, 17–27 × 6–7.5 μm , hyaline or brownish. Basidiospores not seen. Haustoria consisting of both globose cells and irregularly coiled hyphae, hyaline.

ADDITIONAL SPECIMEN EXAMINED: On *Cotoneaster franchetii* Bois (Rosaceae): China, Sichuan, Yanyuan, Mianya, alt. 3164 m, 13.IX.2010, Y.F. Zhu & L. Guo 322, HMAS 250986.



FIGS. 2-7. *Septobasidium sichuanense* (HMAS 242046, holotype).
2. Basidiomata on trunk. 3-4. Sections of basidiomata. 5-6. Basidia (arrows). 7. Haustoria.

REMARKS: Morphologically, *Septobasidium sichuanense* is similar to *S. patouillardii* Burt in having 2-celled basidium but differs in forming rather regular patches of basidiomata with a smooth surface and not cracked in the older parts, lacks a purplish tint, and has thick pillars. *Septobasidium patouillardii* forms irregular patches with cracks in the older surfaces, is velvety with a purplish tint, and has slender pillars, 20–54 μm wide and in section is 300–460 μm thick.

To date, 29 species of *Septobasidium* have been reported in China (Sawada 1933, Couch 1938, Teng 1963, Tai 1979, Kirschner & Chen 2007, Lu & Guo 2009a,b,c, 2010a,b,c, Lu et al. 2010), including the new species reported in this paper.

Acknowledgements

The authors would like to express their deep thanks to Drs Eric H.C. McKenzie (Auckland, New Zealand) and Shuanghui He (Beijing Forestry University) for serving as pre-submission reviewers, to Dr. Shaun Pennycook (Auckland, New Zealand) for nomenclatural review, to Prof. Jianyun Zhuang (Institute of Microbiology, Chinese Academy of Sciences) for Latin corrections, to Mr Ziyu Cao (Institute of Botany, Chinese Academy of Sciences) for identifying the host plants, to Prof. Sanan Wu (Beijing Forestry University) for identifying the scale insect, and to Mrs Xiangfei Zhu for inking in the line drawing. This study was supported by the National Natural Science Foundation of China (No. 30499340 and No. 30870016).

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